ENCRYPTION APPARATUS WITH PARALLEL DATA ENCRYPTION STANDARD (DES) STRUCTURE

ABSTRACT OF THE DISCLOSURE

5   An encryption apparatus comprises first and second N-round DES devices and first and second input circuits. The first N-round DES device cryptographically converts a digital input data block into a first digital output data block nonlinearly, based on an input of a set of encryption keys. The first input means receives and inverts the digital input data block. The second input means receives and inverts the

10   set of encryption keys. The second N-round DES device cryptographically converts the inverted digital input data block into a second digital output data block nonlinearly, based on an input of the inverted encryption keys. The first and second N-round DES devices perform a cryptographic conversion process at the same.